

### **ABSTRACT**

1 Estimates of ringing produced by short recovery pulse sequences (CPMG or modified  
2 CPMG) are used to improve the effects of ringing in a conventional CPMG or modified  
3 CPMG sequences. This is an effective method for removal of ringing when the ringing is  
4 varying over a time interval that would be spanned by a phase alternated pair of  
5 conventional sequences. By use of frequency dithering, ringing due to the excitation  
6 pulse and the refocusing pulses can be removed.

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